

Amendments to the Specification:

Please amend the specification as follows:

Please replace the first full paragraph on page 1, lines 4-8, with the following rewritten paragraph:

The present invention relates to a data distribution system for distributing
a1 [[a]] data to a radio terminal, and especially, to a data distribution system capable of suitably providing necessary information to a radio terminal.

Please replace the paragraph bridging pages 1 and 2 (page 1, line 9 to page 2, line 1), with the following rewritten paragraph:

a2 A radio terminal such as a mobile type telephone set and so forth not only can utilize a function for making a call and transmitting an electronic mail, but also can ~~stores~~ store various kinds of information in an ~~inside~~ internal memory and utilize this stored information. For example, utilization is one example, in which map information is stored in a memory in advance, and this is used at arrival to a destination. Although such several kinds of information can be stored in a memory in a radio terminal, especially in case of a mobile type device, capacity of a memory is restricted and information which can be stored is not so much. Accordingly, a method is widely adopted, in which information is stored in a memory each time by utilizing a communication function of a radio terminal. Also, from a viewpoint where updated information is utilized, a method is effective, in which such necessary information is down-loaded at a necessary time point.

Please replace the paragraph bridging pages 2 and 3 (page 2, line 21 to page 3, line 8), with the following rewritten paragraph:

a3 However, in a technology described in JP-A-136365/1999, it is assumed that the high capacity memory is built in the mobile terminal. Accordingly, unless such a high capacity memory is provided, time margin for information storage becomes less, and cost-up of hardware is certainly introduced. Supposing that capacity of a memory to be built in is small, if contents are distributed in a duplicate form in time, a space in the memory is lost, and after that, a situation occurs that other information cannot be obtained ~~occurs~~. As a result, there is a possibility that a situation occurs where distribution is conducted after scheduled time.

Please replace the first full paragraph on page 3, lines 9-18, with the following rewritten paragraph:

a4 In case that such a situation occurs, even though map information is required by a reason why a user wants to see a map of a station area when the user arrives at a Tokyo station for example, inconvenience that this information cannot be received at arrival time to the Tokyo station occurs. Accordingly, a case in which information obtained with much trouble is not at all useful appears. Thereby, in case that a distribution fee for the information is charged, this disadvantage is provided disadvantageous to the user.

Please replace the paragraph bridging pages 21 and 22 (page 21, line 20 to page 22, line 4), with the following rewritten paragraph:

a5 Fig. 2 shows a functional arrangement centering around a distribution center of such a data distribution system. The user 102 of the system operates the mobile type telephone set 101, and can conduct transmission and reception of a data to and from the distribution center 105 by way of a base station 111. In the distribution center 105, a data receiving section 112 for receiving a data

a5 from the mobile type telephone set 101, and a data transmitting section 113 for transmitting [[a]] data to the mobile type telephone set 101 are provided.

Please replace the paragraph bridging pages ²³~~21~~ and ²⁴~~22~~ (page 23, line 3 to page 24, line 7), with the following rewritten paragraph:

a4 The input data stored in the mobile plan information storage section 115 is read out at predetermined timing by a CPU (Central Processing Unit) (not shown) constituting this distribution center 105, and is sent to a data distribution plan information storage section 116. At this time, an error table memory section 117 obtains information on movement from the mobile plan information storage section 115, and outputs an error in time, which is associated therewith, as an error data. For that, the error table memory section 117 stores an error table (not shown) which statistically represents various kinds of errors in time in association with movement. Similarly, the error data is sent to the data distribution plan information storage section 116. The data distribution plan information storage section 116 subtracts an error time period out of data represented as an error data, after which arrival will be earlier, from scheduled time when the user arrives at a destination of movement, and generates data distribution plan information. For example, it is assumed that departure time is ten o'clock in the morning, and that a standard value of a movement time period to a destination of movement by bus is two hours. In this case, if an error is twenty ~~minutes~~ minutes, which is one corresponding to an earlier case of time periods until arrival of its movement route and movement time band, eleven forty that is calculated by adding a time period to ten o'clock in the morning, which is obtained by subtracting twenty minutes from two hours of the standard value, is the earliest time when the user arrives at a destination of movement.

Please replace the paragraph bridging pages 26 and 27 (page 26, line 10 to page 27, line 2), with the following rewritten paragraph:

a7 Fig. 5 represents one example of an error table stored in the error table memory section. As a statistical value, an error table 161 describes an error (reference error) as a reference value, which can be generated for each kind of mobile means. In case that the mobile means is an "electric train" for example, when a domestic case in Japan is considered as an example, an error of time itself necessary for movement is much less. Accordingly, an error of a time period necessary for a transfer is taken into account, and the reference error is set to five minutes. On the contrary, in case that the mobile means is a "bus", the reference error is set to ten minutes ~~more than that~~. The rest is the same. The reason why a reference error in a case where party travelers leave a hotel is less than that in a case where an individual leaves a hotel is that a case is taken into account, in which there is situation such as regular departure and a less probability of making a call in a case where a collective action is taken.

Please replace the first full paragraph on page 27, lines ³~~2~~-23, with the following rewritten paragraph:

a8 Returning to Fig. 3 again, explanation will be continued. After the error during the movement along the movement route is calculated, this error information and mobile plan information are stored in the data distribution plan information storage section 116 (STEP S135). And, by subtracting an error out of errors, which makes arrival time earlier, from arrival scheduled time out of the mobile plan information, data distribution plan information is generated (STEP S136). After the above processing is completed, the CPU checks whether there are ~~remains of the~~ any remaining items shown in Fig. 4 (STEP S137). In other words, assuming that the number of all items in the mobile plan information table 151 of the user 102 is m (m is a positive integer.), determination on whether a parameter n is larger than a value obtained by subtracting "1" from a value m is conducted. In case that a plurality of items are described, n is not large at a step where this first item is processed (N). Accordingly, in this case, the parameter n is counted up by "1" (STEP S138). And, returning to the STEP S134 again, the similar processing is conducted for the next item (STEP S134 - S137).

Please replace the paragraph bridging pages 28 and 29 (page 28, line 3 to page 29, line 1), with the following rewritten paragraph:

99 In addition, in case that it is necessary to distribute data of a plurality of items at one destination of movement, a time period for the distribution needs a certain finite period of time, and there is a case where a probability that a situation occurs, under which the user has arrived at a destination of movement at a time point when reception of the last item is completed. This is determined by a relation between capacity of a memory provided in the mobile type telephone set 101 and transfer speed of a data, and in a case that the capacity of the memory is less or the transfer speed is high, there are many cases which do not need such consideration actually. In a case that the capacity of the memory is comparatively large and the transfer speed is slow, it is necessary to make time when distribution of ~~[[a]]~~ data of the first item is started slightly earlier, which depends on quantity of data to be sent to the mobile type telephone set 101 from the distribution center 105. Such consideration can be understood when the mobile plan information storage section 115 to which the mobile plan information table 115 is input first or the data distribution plan information storage section 116 which is provided at a backward stage thereof checks a relation between arrival time and the items or a data size of the distribution data in advance.

Please replace the paragraph bridging pages 29 and 30 (page 29, line 8 to page 30, line 11), with the following rewritten paragraph:

910 Fig. 6 shows each component in the distribution center, and data and control signals transferred ~~there between~~ therebetween. The same numerals are attached to the same components as those in Fig. 2. The data receiving section 112 shown in Fig. 2 exists as a part of a mobile plan information input section 191. In the mobile plan information input section 191, the user 102 shown in

all Fig. 1 and so forth not only can input [[a]] data using the mobile type telephone set 101, but also can input various kinds of data using a pointing device such as a keyboard and a mouse (not shown) or a microphone for a voice input. A data distribution control section 192 is a part for conducting entire control, and communication of control data is conducted between the mobile plan information input section 191, and an error calculating section 193, a data distribution plan information generating section 194 and a data transmitting section 113. The error calculating section 193 is connected to an error table 161 and a coefficient table 197 which constitute an error table memory section 117. These error table 161 and coefficient table 197 divide memory regions of a memory device (not shown) such as a hard disk and an optical disk, and use them together with a mobile plan information storage section 115, a data distribution plan information storage section 116A and a distribution data storage section 118. Of course, dependent upon an arrangement of the distribution center 105, independent memory devices can be allocated to those, respectively, and the memory devices can be made independent of each other for a part of those.

Please replace the paragraph bridging pages 36 and 37 (page 36, line 16 to page 37, line 4), with the following rewritten paragraph:

all The When the time read in the "time" column has come (STEP S275:Y), a "distribution data" shown in the first item of the data distribution plan information storage table 251 is read from the distribution data storage section 118 (STEP S276). And, this is transmitted to the mobile type telephone set 101 that is a radio terminal of the user 102 shown in Fig. 2. (STEP S277). In this manner, the reading of the "distribution data" and the transmission in accordance therewith to the mobile type telephone set 101 are conducted at five fifty-five in the morning, in which an error is taken into account for the scheduled time, and the user 102 receives the data to be utilized at Toyama station until six in the morning when the user arrives at the Toyama station.

Please replace the first full paragraph on page 37, lines 5-23, with the following rewritten paragraph:

912 The data transmitting section 113 successively conducts the distribution to each user time-sequentially, and however, if only a series of distribution work to the user 102 in this embodiment is focused, thereafter, whether a value n is larger than ~~"m-1"~~ "m-1" is checked (STEP S278). In case that it is not larger (N), there are still remains in the distribution work for the mobile type telephone set 101 of this user 102. Accordingly, the value n is counted up by "1" (STEP S279), and the flow returns to the processing at the STEP S273 again and preparation for the next distribution is conducted. And, reading of the "time" column in the n -th, that is to say, second item in the data distribution plan information storage table 251 is conducted (STEP S276). In this manner, if the time has come, the distribution of the distribution data is conducted. The distribution work for the user 102 goes forward ~~below~~ in the same manner, and if the value n becomes larger than "m-1" at STEP S278 (Y), the distribution work for the user 102 ends (END).

Please replace the paragraph bridging pages 45 and 46 (page 45, line 14 to page 46, line 7), with the following rewritten paragraph:

913 The data transmitting section 113A successively conducts the distribution to each user time-sequentially, and however, if only a series of distribution work to the user 102 in the modified example is focused, thereafter, whether a value n is larger than ~~"m-1"~~ "m-1" is checked (STEP S378). In case that it is not larger (N), there are still remains in the distribution work for the mobile type telephone set 101 of this user 102. Accordingly, the value n is counted up by "1" (STEP S379), and the flow returns to the processing at the STEP S373 again and preparation for the next distribution is conducted. And, reading of the "region" column in the n -th, that is to say, second item in the data distribution plan information storage table 251A is conducted (STEP S373). In this manner, the

distribution of the distribution data is conducted before each destination. The distribution work for the user 102 goes forward ~~below~~ in the same manner, and
a13 if the value n becomes larger than "~~m-1~~" "m-1" at STEP S378 (Y), the distribution work for the user 102 ends (END).

Please replace the first full paragraph on page 51, lines 5-12, with the following rewritten paragraph:

a14 Furthermore, according to the invention, since a distribution data distributed at a time point when the radio terminal arrives at a previous destination is overwritten by a distribution data to be distributed at a time point when the radio terminal arrives at a new destination, the distribution data can be stored at maximum even in a comparatively less memory region, and efficient utilization of the memory region can be realized.
